

THE PRACTICAL ASPECTS OF QUARANTINE FOR INFLUENZA

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PROBABLY never before has the medical profession been confronted with a more baffling problem than has been presented by the influenza epidemic, both as to its possible prevention and treatment. The apparent futility of practically all measures of prevention, some of which were, at the outset, acclaimed with great assurance by members of our profession, and the failure of any particular line of treatment of the many practised and advocated to be generally recognized and adopted, as being specially advantageous, make it incumbent on one attempting to discuss any phase of the subject to approach it with becoming modesty and diffidence.

Influenza began to appear in Edmonton about October 11th, 1918. From October 15th, by special regulations of the Provincial Board of Health, the disease was made reportable and subject to modified quarantine by placard similar to that used for measles, whooping cough, etc.

Before the disease had become epidemic, the City Board of Health, on October 18th, ordered the closing of all schools, churches, theatres, picture shows and all public meetings generally.

The Provincial Board of Health on October 25th passed a resolution ordering every person in the Province of Alberta to wear a mask outside of his or her house or residence, except when necessary to partially remove the mask for the purpose of eating.

This order was continued in force until November 23rd, when it was made optional, after which practically no masks were worn except in hospitals by nurses and attendants. Had this mask order been instituted a few days before the epidemic reached its peak, it would probably have been acclaimed as the chief factor in bringing about the rapid subsidence of the epidemic, but unfortunately for the extravagant claims made in justification of the mask order as a means of prevention, the number of cases of the

disease continued to increase rapidly for some time after the order was enforced, and public confidence in it as a prevention soon gave place to ridicule. It will thus be seen that nothing was neglected which in theory might possibly have prevented the spread of the epidemic, but the apparent futility of all the laudable attempts at control, are indicated by the following figures, which do not include the two hundred and forty-nine non-residents, coming to the city for treatment, of whom over 30 per cent. died.

	Cases reported	Deaths
October.....	2208	61
November.....	2323	254
December.....	1258	76

With this digression, I will now confine myself to the consideration of the quarantine for influenza attempted as one of the means of prevention.

At the outset of the epidemic, some physicians were reluctant to admit that the cases were genuine cases of the so-called "Spanish influenza", but later, when numerous deaths occurred, it became apparent to even the most conservative that the real disease prevalent in the East was actually in our midst with its frightful toll of death.

In spite of the energetic work of the officials of the health department, in promptly following up all reports of physicians, and information derived from all other sources, by placarding premises and establishing quarantine, it is apparent that the number of cases above reported and quarantined did not at any time represent more than 60 per cent. of the actual number of cases in the community. Hundreds of cases, whether a physician was in attendance or not, were of so doubtful or mild a nature as to be regarded as common colds, and as a result, no quarantine or placard could be affixed. The difficulty of establishing an accurate diagnosis in many of the milder cases was the stumbling-block in the way of carrying out quarantine measures efficiently. Many citizens regarded the placard as an injustice, either because they did not believe the diagnosis justified, or because their neighbours were alleged by them to be avoiding quarantine by concealment or evasion. Some physicians began to be careless or indifferent in reporting their cases, because they alleged that other physicians were not reporting their cases, and charges of discrimination were frequently made against the officials of the health department, on

whom the duty of placarding and establishing quarantine devolved. The number of houses to be placarded and quarantined was so great, that the limited staff of health officials was greatly overworked, and all, except two, suffered from and recovered from the disease during the epidemic. To have attempted prosecutions in all alleged and real cases of failure to report the disease on the part of householders or physicians would not in my opinion have been of any practicable benefit, for the reason that no magistrate would be likely to convict on evidence, which, owing to the impossibility of absolute certainty in the diagnosis of most cases, must necessarily be contradictory or at least doubtful.

It did not appear that those who took the most elaborate precautions to avoid the infection enjoyed any greater immunity from attack, than did those who appeared to take no precautions whatever. The maintaining of bodily health by normal living and the avoidance of panic, worry or fatigue, seemed to be the only practical method of combatting the infection. The element of fatigue among doctors and nurses who necessarily had to work long hours, undoubtedly accounted for their tendency to eventually fall victims to the disease, rather than the element of special exposure which their work entailed.

From the above considerations I can only conclude that the quarantine and placarding for a disease of the peculiar nature of influenza is impracticable, and the expenditure of time, energy and money in attempting to carry out such a law appear to be disproportionate to any apparent benefits derived therefrom. The fact that the quarantine imposed was only a modified one, which permitted all except the person or persons affected to enter or leave the premises, has led some physicians to suggest the advisability of making the quarantine a strict one, as is the case in scarlet fever or diphtheria. The practicability of applying strict quarantine to influenza is doubtful, as the following considerations indicate.

In influenza there are many grades of severity, from the severe abrupt onset, followed quickly by dangerous developments, chiefly pneumonia, so-called, to the slight indisposition which resembles a common cold or coryza, and from which it is impossible to distinguish it. The accurate diagnosis of hundreds of cases is therefore very difficult, and many physicians hesitate to pronounce such cases as influenza or to report them as such. For this reason, and also because no physician at all may have been called, many cases of influenza even under our present modified quarantine law remain unreported. To change this to a rigid quarantine would

undoubtedly have a decided tendency to increase this hesitation of physicians to report cases and also add largely to the number of householders, who in their desire to avoid quarantine of any kind, neglect to call in their family physician as long as possible. There is some justification for believing that certain physicians are given a preference, and profit thereby, because they are known to belong to this hesitating class and because fewer placards follow on their trail than on that of the more conscientious physicians, who gave the public the benefit of the doubt by reporting even their doubtful cases as suspicious. Physicians who lack public conscience should undoubtedly be prosecuted, but the difficulty of obtaining a conviction in the case of such a disease as influenza is obvious, and can only be appreciated by the health officer who has attempted such prosecutions under our present laws.

That the disease was much more prevalent and affected a much larger proportion of the people than the worst epidemic of scarlet fever, diphtheria, and smallpox, we are every likely to have, is apparent. Were it similar to the above rigidly quarantined diseases as to its prevalence and method of transmission, nobody could reasonably question the wisdom of applying to it the most rigid form of quarantine. But we do not yet know with absolute certainty all the avenues by which it is transmitted, and to put on a strict quarantine and maintain it effectively against such an insidious and extremely prevalent affection as we now know it to be, if we take into account the great variety of its manifestations, would necessitate an army of inspectors or policemen and a whole fleet of delivery rigs supplying food at the public expense.

In Chicago, notification and isolation of the patient was required, but placards were only affixed to premises where the occupants had been delinquent in obeying the law *re* notification of the health department and isolation of the patient as far as possible. This method is believed to have secured a much better notification of cases than our system of placarding, which appears to penalize those who honestly try to co-operate with the health department, while those who conceal the disease or neglect to report in large numbers, are subjected to no inconvenience and cannot be prosecuted in the majority of cases with any hope of success. The law regarding modified quarantine associated with placarding of the premises, as applied to the minor diseases, German measles, measles, whooping cough, mumps, and more recently influenza, is, generally speaking, more honoured in the breach than in the observance. Can any health officer safely assert that in his municipality any reason-

able proportion of the cases of such diseases are ever reported to his department, where placards are used? To many of such minor affections no physician is called, and there is little doubt that the desire to avoid quarantine and especially the placard, which unfortunately appears to be regarded with so much disfavour, deters many from calling in their physicians. In Edmonton, knowledge of the majority of such cases is derived from the school teachers who report to the health department all children absent from school without proper explanation. Where there are no children of school age, it is quite possible for such minor affections to exist and recover without detection.

To sum up, it is evident, that no public health law, which has not the endorsement and support of the public generally, can ever be reasonably well enforced. Human nature cannot be altered, but laws can be, and it seems desirable that our regulations regarding quarantine should be revised in such a way as to secure the maximum co-operation of the community, including the medical profession, in their enforcement. The apparent success of the method followed in Chicago in connection with influenza cases, suggests that the same method might work out advantageously in many of the minor and less serious infections now placarded under the name of "modified" quarantine, and secure a much more efficient control of these infections by health departments. It would penalize by a placard only those who failed to report and submit to the instructions of health officials, and would thus be a strong incentive in securing the co-operation of the public generally with health departments in the prevention, as far as possible, of the minor infections, which are unfortunately regarded so lightly by the majority of the community in spite of the fact that many untimely deaths result from them.

I am aware that some reasonable arguments can be advanced in support of placarding the minor or modified quarantine infections, but in my opinion the disadvantages of such a measure, from the standpoint of possible prevention and control, far outweigh the advantages. Following the world war, we hear a great deal about co-operation in all lines of human endeavour. Would it not be possible to secure a greater measure of co-operation of all the forces in our community, in obtaining the maximum efficiency in the enforcement of our public health laws, by reorganization and revision of these along the lines of sane and reasonable regulations which are in accord with the latest and most reliable information derived from scientific investigation, experiment and experience?